
Upper Eel River Basin



The Setting

The upper Eel River basin is that portion of the watershed above the confluence of the main Eel River and the South Fork Eel River in Humboldt County.

The area's headwaters include's portions of Trinity, Glenn, Lake and Mendocino counties.

The Problems

The most critical problem for salmon and steelhead conservation and restoration in this watershed is the loss and degradation of stream habitat through soil erosion and sedimentation caused by poor land use practices associated with logging, grazing and road building. Stream flow characteristics have also been adversely modified by water diversions, severe vegetation removal and road building activities. The use of heavy road-building machinery near streams causes some degree of soil erosion and sedimentation. However, the substantial loss of stream side vegetation compounds this damage; riparian vegetation normally intercepts soil moving from surfaces next to or above streams and thus reduces sedimentation.

As with many fish screens in California, the one located at Pacific Gas and Electric Company's Van Arsdale Dam diversion to Potter Valley is dysfunctional and has been since its installation in 1972. In 1987, a new fish ladder was built over the dam. This will allow spawners to reach the area above the dam and more juvenile fish will die at the dysfunctional fish screen at the Potter Valley diversion. The Van Arsdale fish screen must be replaced; the project, for which public funds are being sought, may cost more than \$2.5 million.

Gravel mining also frustrates salmon and steelhead conservation efforts in the upper Eel River watershed. The act of removing the gravel causes siltation; and taking the gravel

itself can remove critical habitat needed for spawning. County governments should be encouraged to find safe sources of gravel and to develop local ordinances that help preserve instream salmon production opportunities.

A watershed approach is needed

Although the Eel River carries one of the world's highest sediment loads, **it** still has substantial fish resources and one of the highest potentials for restoration in the state.

The salmon and steelhead conservation and restoration opportunities in this watershed should be approached through a coordinated watershed-wide fishery management and restoration program. Local groups interested in fish restoration would be assisted by the creation of a watershed-wide entity to coordinate land and stream restoration efforts — an Eel River Watershed and Fishery Restoration Program.

This must include both public and private landowners, the U.S. Forest Service, the U.S. Bureau of Land Management, Native American tribal governments, the railroad and utility companies. Activities to address erosion and sedimentation will involve planting of upland areas to reduce runoff, which will then allow rehabilitation of riparian vegetation. To complement these efforts, specific riparian zone protections should be added to state laws and local ordinances. Drainage problems must be addressed and both the scope and enforcement of the Forest Practice Act should be improved.

The Solutions

ACTION: The basin subcommittee believes that an Eel River Watershed and Fishery Restoration Program should be established. It should regard the watershed as a "natural hatchery," provide funding for restoration work, and encourage citizen-based projects to restore and monitor streams on an ongoing basis.